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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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Michael A. Myers
BINGHAM McHALE LLP
2700 Market Tower
10 West Market Street
Indianapolis, IN 46204-4900

| EXAMINER |
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DANIELS, MATTHEW J

| ART UNIT | PAPER NUMBER |
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1732

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/628,593

Applicant(s)

TRUSTY ET AL.

Examiner

Matthew J. Daniels

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-16, 18-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/28/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I (Claim 17) in the reply filed on 22 July 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claim 17** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim is specifically rejected for use of "appropriate" in portions (c), (d), (e), (f), and (j). Limitations drawn to something being "appropriate" are deemed to be indefinite because determination of appropriateness may be different for each individual reading the claim. Appropriate revision is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claim 17** is rejected under 35 U.S.C. 102(b) as being anticipated by Cohan (USPN 3333300). The limitations (a), (b), and (d) are deemed to be drawn to a particular intended use. However, the intended use does not materially affect the claimed method, and therefore these limitations are not given patentable weight. Because the reference to Cohan meets the method limitations, and because it could perform the same intended use as that sought by the claim, it is deemed to anticipate the claimed subject matter. Also, one would inherently take the desired measurements before manufacturing a part to meet the necessary dimensions. **As to Claim 17**, Cohan teaches the following:

- (c) selecting an appropriate core element for a mold approximating the dimensions of the workpiece (Fig. 2, Item 84)
- (e) selecting an appropriate flange forming mold providing a mounting flange of the appropriate dimensions to be mounted on the back end of a turning machine (Figs. 3 and 4)
- (f) selecting an appropriate top or end cap to fit the selected tubular mold portion (Fig. 2, Item 16 or 50)
- (g) assembling the flange-forming mold portion to the tubular mold position (Fig. 2)
- (h) securing the central core element interiorly of the tubular mold portion by placing the top cap atop the open end of the tubular mold portion (Fig. 2 in its entirety) and securing the upper end of the core element by way of a fixing element (Fig. 2, Item 82)
- (i) introducing plastic material in a molten state into the interior of the mold so formed through a fill hole provided in the top cap until the interior void of the mold is substantially filled (See Fig. 7, Item 128, and Fig. 10)

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(j) allowing the liner once formed to set up for an appropriate length of time to permit the plastic material to cure to a sufficient state of hardness (this aspect is inherent in that a shaped article is removed from the mold, see Fig. 7)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 17** is rejected under 35 U.S.C. 103(a) as being unpatentable over Cohan (USPN 3333300) in view of Svenson (USPN 1909135). The limitations (a), (b), and (d) are deemed to be drawn to a particular intended use. The intended use does not materially affect the claimed method, and therefore these limitations are not given patentable weight. However, in the alternative, the subject matter of the intended use limitations would have still been prima facie obvious because one would obviously take the desired measurements before manufacturing a part to meet the necessary dimensions. **As to Claim 17**, Cohan teaches the following:

(c) selecting an appropriate core element for a mold approximating the dimensions of the workpiece (Fig. 2, Item 84)

(e) selecting an appropriate flange forming mold providing a mounting flange of the appropriate dimensions to be mounted on the back end of a turning machine (Figs. 3 and 4)

(f) selecting an appropriate top or end cap to fit the selected tubular mold portion (Fig. 2, Item 16 or 50)

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- (g) assembling the flange-forming mold portion to the tubular mold position (Fig. 2)
- (h) securing the central core element interiorly of the tubular mold portion by placing the top cap atop the open end of the tubular mold portion (Fig. 2 in its entirety) and securing the upper end of the core element by way of a fixing element (Fig. 2, Item 82)
- (i) introducing plastic material in a molten state into the interior of the mold so formed through a fill hole provided in the top cap until the interior void of the mold is substantially filled (See Fig. 7, Item 128, and Fig. 10)
- (j) allowing the liner once formed to set up for an appropriate length of time to permit the plastic material to cure to a sufficient state of hardness (this aspect is inherent in that a shaped article is formed, see Fig. 7)

Cohan appears to be silent to the subject matter of limitations (a), (b), and (d). However, they would have been *prima facie* obvious over Svenson, who teaches the following:

- (a) determining the outer dimension of the shaft (inherent or obvious in that bushing, Item 13, is designed and intended to fit over the shaft, Item 1)
- (b) determining the inner diameter of the spindle of the turning machine (inherent or obvious in that the bearing sleeve, Item 15, is designed and intended to fit between the bushing, Item 13, and the support, Item 3)
- (d) Svenson teaches that wear is intended to occur evenly between the bushing, Item 13, and the sleeve, Item 15 (See Page 2, lines 32-35). In view of Svenson's teaching that wear is intended to occur between Items 13 and 15, it would have been *prima facie* obvious to design the inner diameter slightly smaller than the spindle in order to desirably avoid wear on the spindle by ensuring a snug fit of the bushing (Item 13) to the spindle. Svenson also teaches that rotative

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movement between spindle and bushing is undesirable (Page 1, lines 96-101), and thus a snug fit appears obvious. By the configuration between the bushing (Item 13) and sleeve (Item 15), it would have been obvious to select "appropriate dimensions" for mounting into the sleeve.

It should be noted that Svenson's invention is directed at the lathe spindle, and appears to be silent to work holding means. However, Svenson's invention is directed to preventing eccentricity (See Page 1, lines 8-30), and utilizes a bushing (Item 13) and bearings (Items 24-26) in order to prevent eccentricity in a rotating shaft. In the method of making, the bushings would have performed the same intended use upon the spindle, and thus meet the claim limitations directed to the intended use. It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Svenson into that of Cohan for two reasons:

- (a) Cohan specifically suggests spindles (3:22-24)
- (b) Cohan teaches a method that effectively changes the location of the parting plane (in the mold) so that the bearing surface of the roller (the outside diameter) is smooth, uninterrupted, and free rolling because there is no gate upon that surface, the gate being located in a harmless position on the side (4:22-29). This effect would have been obviously desirable for an intended use as a bushing in which even wear with the sleeve was desired (See Svenson, Page 2, lines 30-35, and Items 13 and 15 in the figure).

Conclusion

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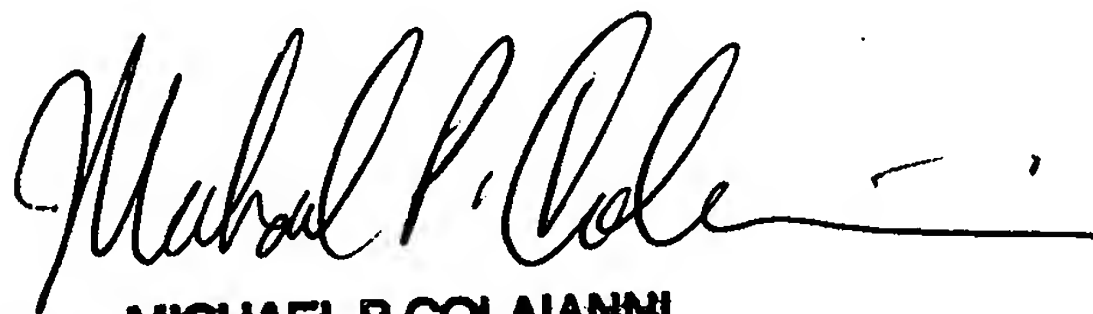
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Daniels whose telephone number is (571) 272-2450. The examiner can normally be reached on Monday - Thursday, 7:30 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJD 8/16/05

MJD



MICHAEL P. COLAIANNI
SUPERVISORY PATENT EXAMINER